

FOR YOUNG PEOPLE.

DILLY DALLY.

As sweet a child as one could find, If only she were prompt to mind: Her eyes are blue, her cheeks are pink, Her hair curls up with many a kink— She says her name is Allie, But sad to say, Offtimes a day We call her Dilly Dally.

If sent on errands, grave or gay, She's sure to loiter by the way; No matter what her task may be, "I'll do it by and by," cries she, And so, instead of Allie, We, one and all, Have come to call This maiden Dilly Dally.

I think, if she could only know How wrong it is to dally so, Her tasks undone she would not leave, Nor longer mother's kind heart grieve; And then, for Dilly Dally, We'd gladly say, Each well-spent day; "This is our sweet Allie," —M. K. Buck, In Our Little Ones.

KITTEN AND BEAR.

Pussy Frightened Bruin Up a Tree and Kept Him There.

Chris Burns, the veteran first sergeant of troop D, has a kitten which during the summer camping of the troop at the Lower Geyser basin made her home within the sergeant's tent. Here, curled up on a pair of army blankets, she defied the world in general and dogs in particular. When the latter approached she would elevate every bristle on her brave little back, her eyes would glow like live coals and her tail would swell up threateningly. If the dogs approached too near, she would hiss and exhibit the usual signs of hostility until the intruders had vanished from her neighborhood.

One day, when the camp was bathed in sunshine and every soldier in camp felt lazy, an inquisitive black bear came down the mountain side and, whether because he was in search of adventure or because attracted by a savory smell from the cook's fire, began to walk about among the white tents of the cavalry command.

Suddenly the kitten caught sight of him. Dogs by the score she had seen,



KITTEN KEPT CLOSE GUARD OVER HER CAPTIVE.

but this particular "dog" was the largest and the hairiest dog she had ever seen. But she did not hesitate. It was enough for her that an enemy had invaded her special domain. Hissing forth her spite, while her little body quivered with rage, she darted forth at the bear. The onslaught was sudden, and one glance was enough for Bruin. With a snort of fear, Bruin made for the nearest tree, a short distance away, and did not pause until he was safely perched among the upper branches. Meanwhile the kitten stalked proudly about on the ground beneath, keeping close guard over her huge captive, her back still curved into a bow, and her hair still bristling with righteous indignation, while her tail would now and then give a significant little wave, as if to say: "That's the way I settle impudent bears."

The soldiers, who meanwhile had poured forth from their tents, could scarcely believe their eyes; but there was the bear in the tree and the kitten below, and there were those who had seen the affair from beginning to end.

And perhaps the strangest part of it all was that the bear would not stir from his safe position in the branches until the kitten had been persuaded to leave her huge enemy a clear means of retreat! Then he slid shamefacedly down from his perch, and ambled hastily off towards the mountain.—Lieut. Charles D. Rhodes, U. S. A., in St. Nicholas.

How Alligators Are Hunted.

There are men in the swamps of the south who make their living by hunting alligators. Their mode of hunting the saurians is very ingenious, as well as successful. In the summer, when the swamps dry out, the alligators which abound there live in holes ten or more feet deep, and inclined or slanting. The weapon of warfare used upon these creatures is a long pole, at the end of which is a sharp steel prod and a hook. This is run down into the hole, and the alligator is prodded until he becomes angry. Then he snaps at the pole and is caught on the hook. He is then drawn up to the mouth of the hole and shot through the eyes until dead. The teeth are extracted and the hide drawn off, and both are sold at the nearest town. If the alligator is young, some parts of the flesh are eaten by the hunters.

Most all of the buttons used in the United States are manufactured in western Massachusetts towns.

WELL-TRAINED ZEBRA.

To Be Seen Any Day in the Streets of Liverpool, England.

Liverpool boasts one of the biggest wild beast emporiums—if not the biggest—in the world. It is the famous house of Cross. Mr. William Cross, of Liverpool, is known at the ends of the earth. He always has some queer argosies on the sea consigned to him—perhaps a shipload of reptiles, a dozen elephants, or a few thousand parrots. The above photograph represents some of Mr. Cross' marvelous ability in training animals. The zebra is notoriously hard to tame, yet here is one that will actually carry a lady through the



TAMEST ZEBRA EVER TRAINED.

crowded streets of a great city, obedient to the slightest touch of the rein—for all the world like a pony that has been "used to children"—to quote the familiar words of an advertisement. It must, indeed, be a novelty to take one's rides abroad on the brilliant back of a real live zebra, and quite apart from being a capital "ad" for Mr. Cross' wonderful establishment, this docile specimen is something of an achievement, representing as it does many weary months of patient and unremitting labor. At first, the appearance of this lady, mounted, caused some excitement, but the novelty soon wore off. The animal will actually lie down and get up at the word of command.—Strand Magazine.

PET RAT ACTS MEAN.

Hit Its Tiny Mistress, Who Had to Be Taken to the Hospital.

Children sometimes adopt strange animals for pets. In Philadelphia two little girls can be seen almost every day playing with a pair of tiny alligators, and a neighbor of theirs, three-year-old Violet Ricketts, of 1523 Summer street, took a great fancy to a rat. Last week she was carried to the Hahnemann hospital suffering intensely from a bite in the hand from the animal.

The rodent which caused the child's injuries belongs to the next-door neighbor of the Ricketts, and was captured in a trap several years ago and tamed. It is in the habit of running about the neighborhood, and for a long time has been a frequent visitor at the Ricketts house.

The child and the rat became great friends. The other afternoon the little girl was feeding it when a big dog belonging to her father came in the room. The rat became angry and jumped at the baby, catching the little one's hand with its teeth. The child's cries brought her mother, who tried to set the dog on the rat, but the dog refused to interfere, as the pair had been long friends.

The rat then turned upon Mrs. Ricketts, who had a hard time to prevent it biting her. She finally threw a piece of wood at the little animal, and he ran through a small hole in the kitchen by which it had been accustomed to go and come to the adjoining house. The child was taken to the hospital, and the physicians found it necessary to take five stitches in the wound.—Chicago Chronicle.

KILLED HIS KEEPER.

How an Elephant in India Was Punished for the Crime.

Did you ever see an elephant whipped? I don't suppose you would ever forget it if you did. They frequently do it in India, because elephants are very obstreperous at times.

Recently an elephant, Abdul, was convicted by court-martial for killing his keeper, and sentenced to 50 lashes and two years' imprisonment.

Two elephants led Abdul to an open space, and in the presence of the whole battery the punishment began. The culprit trumpeted in fear, and made an unearthly noise.

There were 14 elephants on one side, and the officers and men of the battery on the other three. In the center of this hollow square stood Lalla (No. 1), the flogger, and the prisoner. The latter was chained by the four legs to as many heavy iron pegs, and could not move.

Fastened to Lalla's trunk was an immense cable chain. When all was ready the major gave the word, and down came the chain with a resounding whack. Abdul roared for all he was worth. Fifty times was the operation repeated, and then Abdul was taken to a compound, where he was to remain a prisoner for two years.—Answers.

Truly Wonderful Pig.

Pennsylvania boasts of a wonderful blind pig. It was born blind and at the tender age of three months was sold to a neighboring farmer, who took it home in his wagon. The road was not only crooked, but was cut by several cross roads, and it passed through a village with a dozen cross streets, the entire distance being two miles beyond the village. The pig was turned into a small lot, and the third day afterward the little blind fellow was back with its former owner. There was no other way for the pig returning home than by following the road over which it had been carried in the box. Still, as dumb animals perform these feats by instinct, a blind pig would be on an equal footing with any other.

HUGE ELECTRIC MOTORS.

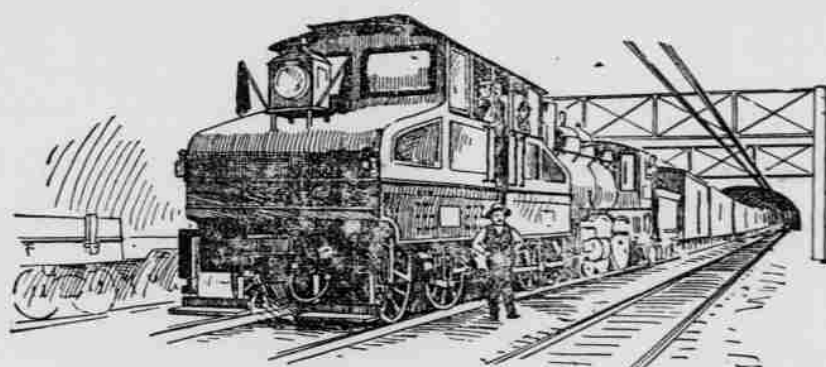
Used to Haul Railroad Trains Through a Tunnel.

A New and Vast Reform in Railroad—Complete Description of the Locomotives and Their Equipment.

[Special Baltimore Letter.]

The giant electric locomotives of the Baltimore & Ohio railroad are now hauling the passenger trains through the belt line tunnel at Baltimore. This tunnel is the longest soft earth tunnel ever driven and runs under Howard street, one of the principal thoroughfares of the city.

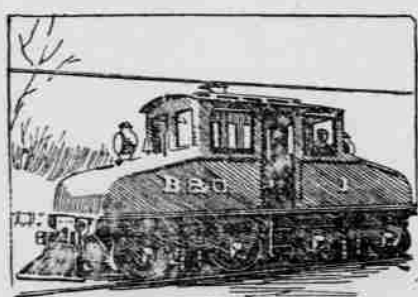
The tunnel extends from Camden station on the south to Mount Royal station on the north and is 7,339 feet, or nearly 1½ miles long. From the Camden station the line rises on what is a heavy gradient for a steam railroad, and all trains in this direction require the assistance of a very powerful locomotive. To haul very heavy freight trains through this tunnel by ordinary freight steam locomotives would fill it with smoke and noxious gases and render it intolerable, if not actually dangerous, to passengers in the trains passing soon after; even the smoke from an ordinary passenger train in a tunnel of this length would be quite objectionable. The question of proper ventilation of the tunnel, therefore, became important. The disadvantages of the steam locomotive were patent, and some means had to be found of doing away with the smoke and gases either by ventilation or the abandonment of steam haulage in the tunnel. The various systems not involving the production of smoke and gas were considered, and by process of exclusion all



ELECTRIC LOCOMOTIVE ATTACHED TO FREIGHT TRAIN.

were discarded except electricity. This system was adopted, and for the past two years three electric locomotives, the largest ever built, have handled the entire freight service of this great trunk line through the tunnel. They would probably have been put into passenger service before this, but the receivers decided for various reasons to postpone their employment in the haulage of passenger trains until the completion of their new station. This was opened recently and the passenger, as well as the freight, traffic is now being handled by the electric locomotives.

The electric locomotives are the largest of their type ever built. They consist of two trucks, each truck having two axles and four wheels. Each axle carries a motor—the most powerful railway motor ever designed, having a power of 360 horse-power. This gives to the locomotives four motors, with a total pulling capacity of 1,440 horse-power. The motors are of pyramidical shape and have six poles and six sets of brushes. They stand about five feet high and are gearless, that is, the armatures are not fixed to the axles, but are built up on a sleeve through which the axle runs. The armature is part of the motor which turns, and each end of it is fitted with a large cast iron star. The



ELECTRIC LOCOMOTIVE.

points of the star fitted into rubber-shod receptacles in the driving wheels, and when the armature turns the wheels are revolved by the star.

The two trucks are fastened securely together and are covered by a spacious iron cab resembling the cab of an ordinary steam locomotive with a tender shield at each end. This cab contains all the apparatus necessary to operate the locomotive. At one end is a large controller, by the manipulation of which electricity is let into or cut out of the motors as required. This controller is large, as it has to break the very heavy current brought to the motors. A dial instrument in front of the motorman shows him just what power the locomotive is taking. Whenever a current of electricity is broken there is always a spark. In a modified shape we see it in the ordinary arc light. The size of the arc depends upon the amount of current flowing between the two points, and if allowed to continue it would burn away the metal of the controller very much as it burns away the carbons in an arc lamp.

The controller has, therefore, an ingenious device known as a magnetic blow-out. When an arc is about to form a powerful magnetic draft is created which instantaneously extinguishes the arc as soon as it is started. The cab is also provided with safety devices to prevent any undue rush of current getting into the motors and causing damage. It also contains an air compressor for the air brakes and the whistle. By another ingenious automatic contrivance the motor starts

when the pressure in the tanks falls off and stops when the air reaches the required pressure.

Each shield carries a headlight and one carries a bell. The weight of each locomotive is 192,000 pounds, or 96 tons.

The tremendous hauling power of these huge machines has been many times demonstrated. When they were first put into service the drivers were apt to try experiments, and around the locomotives have grown up a series of stories which are told in the round-houses all along the road. But in October of last year an actual reliable demonstration was made. Due to some misunderstanding on the part of the operator two freight trains, with 44 loaded freight cars and three engines, none working and all coupled together, were stopped in the tunnel on the up grade. It would have required all the power of the three engines to start this tremendous load of some 2,000 tons, and they would probably have had to call assistance, but the electric locomotive started this long train seemingly as easily as any of the ordinary trains it had up to then handled. In less than two minutes the speed on the up grade was 12 miles an hour. With freight trains the normal speed is limited to 15 miles an hour, but with the passenger trains the electric locomotives have developed a speed of 50 miles an hour on this grade.

To carry the large amount of current required in the operation of these locomotives the overhead system is used, but instead of the trolley wire a shoe which is attached to a flexible trolley on the roof of the locomotive runs in an iron conduit suspended above the track in the open and at the center of the arch of the tunnel. Every precaution has been taken to insulate the overhead line perfectly. The length of the overhead structure is over 15,000 feet, and the electric locomotives op-

erate beneath this for the entire distance. The power plant which supplies current for the locomotives and for the incandescent and arc lamps in the tunnel, waiting-rooms and stations, is one of the most extensive in this country. It is located just east of the Camden station in a building 322 feet long. Large additions have recently been made to the electric plant and it is now capable of furnishing 3,000 kilowatts or 3,000 horse-power in electric power and about 1,150 horse-power for the lighting service. Of course, the locomotives are not always in service and the demand on the power plant is intermittent. In order that the dynamos, therefore, should not remain idle when the locomotives were not working, the railroad company made an arrangement with the local street car company to take a certain amount of its excess power; it now supplies to the Baltimore Traction company enough electricity to operate nearly 200 street cars in the city of Baltimore.

The electric line has now been in successful operation since its inauguration, and has attracted attention the world over. The performance of the electric locomotives has been carefully watched by steam railroad men and mechanical experts, as the pioneers of a new and vast reform. By the use of electricity the most objectionable feature of tunnels—smoke and gases—is done away with entirely and travel has become even comfortable.

Ample Provocation.

"I understand you pounded the man in the next flat?" "Pound him! Well, I should think I did. I nearly killed the scoundrel!" "What was the trouble?" "He insulted me—actually insulted me with deliberation and malice aforethought; and it was no trifling insult, either."

"What did he say?" "He asked me if I was the man who played the cornet every night." "Why didn't you kill him?"—Chicago Post.

Asked the Boy Too Much.

A boy who had been up for an examination in Scripture had utterly failed, and the relations between him and the examiner had become somewhat strained. The latter asked him if there were any text in the whole Bible he could quote. He pondered and then repeated: "And Judas went out and hanged himself." "Is there any other verse you know in the Bible?" the examiner asked.

"Yes. 'Go thou and do likewise.'" There was a solemn pause and the proceedings terminated.—Catholic Standard and Times.

Advanced Methods.

"Anything new in your cooking club?" "Yes; we don't waste time on any woman's recipes unless they are accompanied by an affidavit from her father or husband."—Chicago Record.

A Different Thing.

Smith-Black—Pool! my wife can thrash you. Black-Smith—Well, if you think so come on and fight.

Smith-Black—Steady—hold on—I didn't say I could.—Yellow Book.

Very Handy at Times.

Blinks—Insanity is a terrible curse, is it not? Winks—Depends a good deal upon whether you've just killed a man or not.—Brooklyn Life.

BUILDING AND SCIENCE.

ART IN ARCHITECTURE.

Designed and Written Especially for This Paper.

This nine-room residence, erected upon a stone foundation, will cost \$2,000.

The size of the rooms is as follows: Parlor, 12x15 feet; sitting-room, 12x12 feet; dining-room, 12x13 feet; kitchen, 10x14 feet; chambers, 12½x13 feet, 9½x13 feet 9x9 feet, and two bedrooms 11½x8 feet, and 8x9½ feet.

The size of the house upon ground is 22x36 feet; height of basement, 7 feet; first and second stories, 9 feet 6 inches. The sheathing is of flooring, siding narrow O. G.; tar building paper be-

The attic is floored with single floor. The entire basement floor is concreted. All work and material are intended to be of the best kind. The wainscoting in kitchen, pantry and dining-room is of cement, painted three coats, color to suit owner.

The sink is porcelain lined. The water is taken from a cistern in yard, capacity 50 barrels. At completion of house, it must be left broom clean, all ready for occupancy.

GEORGE A. W. KINTZ.

REGISTERED MAIL.

A Machine Which Makes the Sender His Own Clerk.

An inventor says he has spent three years in perfecting a slot machine which is designed to make every person



AN IDEAL TWO THOUSAND DOLLAR RESIDENCE.

between floors, siding and sheathing; all floors double; studding 2x4; rafters 2x6; joist 2x10; plates for stone wall 2x10 double with broken joints; two-coat plaster work throughout in all rooms. The flushing, downspouts, gutters and finish are of galvanized iron. American glass double thick is used, except where art glass is shown. Trim throughout is of Georgia pine. Maple floors in kitchen and pantry; sink in kitchen; fire place in sitting-room; shelves in pantry and closets. The exterior of house is painted in three coats, color to suit owner.

Hardware throughout is to be of the best kind. Parlor is to be tinted cream;

his own registered letter clerk and to facilitate the forwarding of registered mail. Some of the machines have been placed in position, and their use sanctioned by the postmaster general. Under his orders they are to have a six weeks' trial. While the machines are being officially tested an agent of the post office is to be in constant attendance at each. He will explain the mechanism to the public. To work the machine a dime is dropped into a spout at the upper right-hand side. A square iron cover flies up automatically and reveals a roll of white paper. On certain lines are to be written the name and address of the person to whom the letter is sent, and the name and address of the sender. Then a small lever at the right-hand upper end of the machine is to be pressed back. This opens the letter slot in front. When the letter is dropped in the handle of a big crank at the right must be forced back until a bell rings. The iron cover closes and locks over the writing tablet. The big lever should then be drawn forward until a bell rings. As this is done, a duplicate of the writing, on a separate piece of paper, slips out of the machine at the left-hand side and upon this paper is also imprinted the post office date marks, the serial number of the letter, and signature of the postmaster. This is your receipt. The original writing is removed with the letter. In order to get the letter to the post office without a chance for the carrier to tamper with it, the hopper bottom of the box is so constructed that it can only be opened when the mail bag is attached. The mail bag can only be opened in conjunction with the hopper or at the post office. The machine is constructed with a delicate balance where the dimes are weighed. If too much worn, instead of passing into the machine they fall through a hole on the floor, after being rejected by the scale.—Chicago Inter Ocean.

The Pegamoid Process.

Pegamoid is the name of a process employed in England for rendering fabrics, wall-paper, etc., waterproof, germ-proof, dust-proof and stain-proof. It may prove valuable from a sanitary point of view. It consists in applying a composition in a liquid form which solidifies after impregnating the fibers or pores of the material treated. Ceiling and wall papers, also imitation leathers, treated by this process can be washed with water and strong disinfectants without injuring their surface. The only thing which has a deteriorating effect is alcohol. Wood, iron and stonework can be painted by this process. Silver paint is untarnishable.

Well Two Miles Deep.

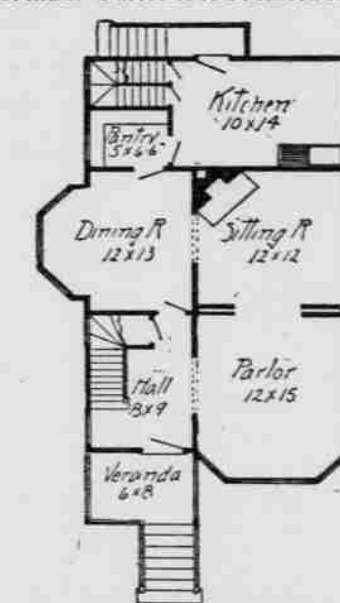
It is expected that the new well—the deepest in the world—which will soon be completed near Pittsburgh, will reach two miles into the earth. It is to be bored in the interest of science, and is already more than one mile deep. Both oil and gas were struck in paying quantities a comparatively few feet below the surface. This gas is now being utilized for operating the drilling engines. Prof. Hallock, of Columbia college, believes that a temperature of 228 degrees will be reached, and that an ample supply of natural steam will furnish the cheapest power available to man.

If X Rays Were Visible.

Prof. Roentgen says that if X rays could be rendered visible the appearance would be that of a room filled with smoke and lighted by a candle. They emanate in all directions from the air irradiated by them.

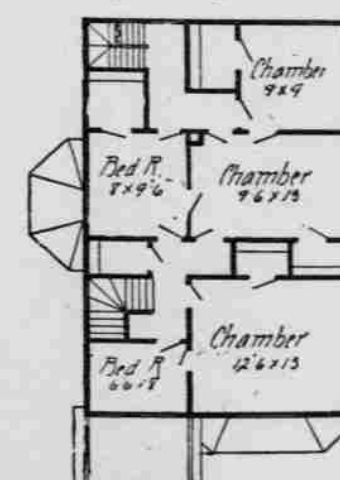
No Change in View.

"Kitty thinks Harry doesn't intend to propose." "Has he quit visiting her?" "No; but he gave her a silver name plate for her wheel."—Chicago Record.



PLAN OF FIRST FLOOR.

sitting-room blue; dining-room maroon; kitchen green; pantry green; hall terra-cotta, and all chambers a color to suit owner. The rear stairway leads to the attic. The front door has a beveled plate sash panel. The basement is reached by a stairway from the kitchen. The basement is divided off into furnace room, fruit room, coal room and laundry. The shingles upon the roof are cedar, painted one coat. The chimney showing above roof is of



PLAN OF SECOND FLOOR.

press brick. All curtains will be placed on windows, in color to suit owner.

The entire house is piped for a furnace. All doors, except front and sliding doors, are two feet eight inches by seven feet, five cross panel doors. The carving on front door and newel post caps is to be executed in an artistic manner.

The tile facing around fireplace and the tile hearth of same will be of a color and design to suit owner.

The cornice on roof projects three feet out from side of house. This is a very nice feature and gives good shadow and architectural effect. All rooms are well-lighted and the design is well-adapted for a city, suburban or country home.